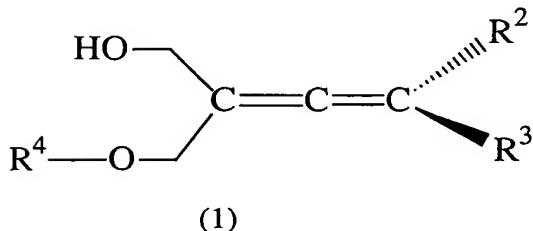
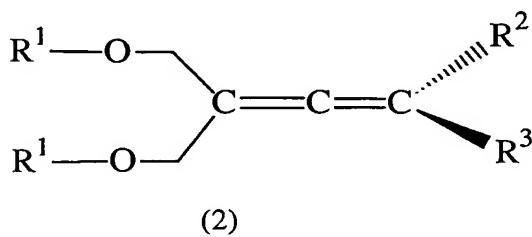


CLAIMS

1. A process for producing an optically active allene represented by formula (1):



5 wherein R² and R³ are different and each represents a hydrogen atom, an optionally substituted C₁₋₂₀ alkyl group or an optionally substituted C₆₋₂₀ aryl group, and R⁴ represents an acyl group, which comprises reacting an allene derivative represented by formula (2):



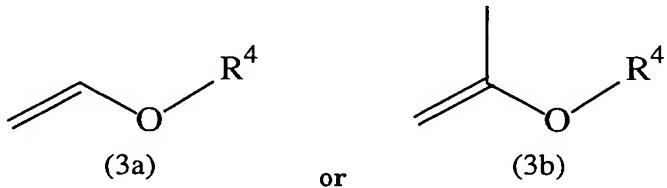
10 wherein R¹ represents a hydrogen atom or an optionally substituted acyl group and R² and R³ have the same meaning as defined above, with an acylating agent having an acyl group represented by R⁴ when both R¹'s are each a hydrogen atom or with water when both R¹'s are each an acyl group represented by R⁴, in the presence of an enzyme catalyst.

15 2. The process for producing an optically active allene according to claim 1, wherein the enzyme catalyst is a lipase enzyme or an esterase enzyme.

3. The process for producing an optically active allene according to claim 2, wherein the enzyme catalyst is at least one member selected from the group consisting of Candida Antarctica lipase, Pseudomonas fluorescens lipase, Pseudomonas cepacia lipase, porcine

pancreatic lipase, porcine liver esterase and Candida rugosa lipase.

4. The process for producing an optically active allene according to any one of claims 1 to 3, wherein the acylating agent is a compound represented by:



- 5 wherein R⁴ represents an acyl group.

5. The process for producing an optically active allene according to any one of claims 1 to 4, wherein R¹ is a hydrogen atom, an optionally substituted C₁₋₂₀ alkylcarbonyl group or an optionally substituted C₆₋₂₀ arylcarbonyl group.

6. The process for producing an optically active allene according to any one of claims 10 1 to 5, wherein R² and R³ are different and each represents a hydrogen atom, an optionally substituted C₁₋₁₀ alkyl group or an optionally substituted C₆₋₁₀ aryl group.

7. The process for producing an optically active allene according to any one of claims 1 to 6, wherein R² and R³ are different and each represents a hydrogen atom, an optionally substituted C₁₋₄ alkyl group or an optionally substituted C₆₋₈ aryl group.

- 15 8. The process for producing an optically active allene according to any one of claims 1 to 7, wherein R⁴ is an acetyl group, a butyryl group or a benzoyl group.